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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/568,693

02/17/2006

Toshiyuki Masuda

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EXAMINER

DOLLINGER, MICHAEL M

ART UNIT

PAPER NUMBER

1796

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/568,693	<b>Applicant(s)</b> MASUDA, TOSHIYUKI	
	<b>Examiner</b> MICHAEL DOLLINGER	<b>Art Unit</b> 1796	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>02/17/2006 and 09/08/2006</u> .                               | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 3 is objected to because of the following informalities: "a linear hydroxy alkyl group" on lines 15-16 should read "a linear hydroxy alkylene group" and likewise "a hydroxy alkyl group having a branch" on line 16 should read "a hydroxy alkylene group having a branch". Appropriate correction is required.
2. Claim 3 is objected to because of the following informalities: on lines 19 and 20 as well as lines 33 and 34, the limitation "a substituted- $\alpha$ - $\alpha'$ -xylylene group" appears twice. Appropriate correction is required.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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4. Claims 1-9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1, 3 and 6-11 of copending Application No. 10/592,393. Although the conflicting claims are not identical, they are not patentably distinct from each other. It is clear that all the elements of the instant claims are to be found in the copending claims (as the instant claims fully encompass copending claims). The difference between the instant claims and the copending claims lies in the fact that the copending claims include more elements and are thus more specific. Thus the invention of copending claims is in effect a "species" of the "generic" invention of instant claims. It has been held that the generic invention is "anticipated" by the "species". See *In re Goodman*, 29 USPQ2d 2010 (Fed. Cir. 1993). Since instant claims are anticipated by the copending claims, they are not patentably distinct from each other.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claims 1, 2 and 7-9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2 and 9-11 of copending Application No. 10/590,089. Although the conflicting claims are not identical, they are not patentably distinct from each other. It is clear that all the elements of the instant claims are to be found in the copending claims (as the instant claims fully encompass copending claims). The difference between the instant claims and the copending claims lies in the fact that the copending claims include more elements and

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are thus more specific. Thus the invention of copending claims is in effect a "species" of the "generic" invention of instant claims. It has been held that the generic invention is "anticipated" by the "species". See *In re Goodman*, 29 USPQ2d 2010 (Fed. Cir. 1993). Since instant claims are anticipated by the copending claims, they are not patentably distinct from each other.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claims 1, 2 and 4-8 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 2, 3 and 10-14 of copending Application No. 11/502,022. Although the conflicting claims are not identical, they are not patentably distinct from each other. It is clear that all the elements of the instant claims are to be found in the copending claims (as the instant claims fully encompass copending claims). The difference between the instant claims and the copending claims lies in the fact that the copending claims include more elements and are thus more specific. Thus the invention of copending claims is in effect a "species" of the "generic" invention of instant claims. It has been held that the generic invention is "anticipated" by the "species". See *In re Goodman*, 29 USPQ2d 2010 (Fed. Cir. 1993). Since instant claims are anticipated by the copending claims, they are not patentably distinct from each other.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

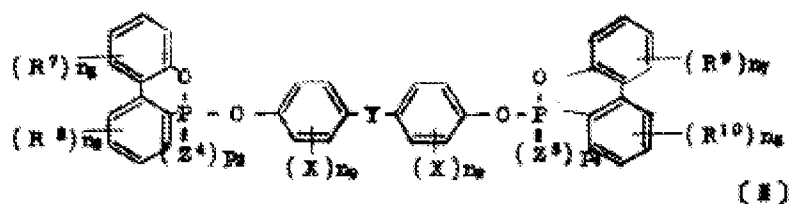
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-4 and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Endo et al (JP 53056250 A). An oral translation of this document was provided by Irina Knizhnik, USPTO in house translator.

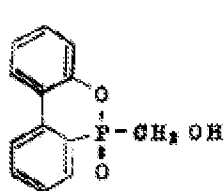
9. Endo et al disclose a flame retardant polyester composition comprising a polyester blended with a flame retardant phosphorous compound in an amount of 500 to 20,000ppm of phosphorus [abstract]. In the Practical Examples 7-10 the composition is extruded into fibers with a size of 75 denier (67.5 dtex). The polyester is formed from a dicarboxylic acid including terephthalic acid and a diol including ethylene glycol and propylene glycol [page 3 bottom-right column]. The phosphorus compounds are of the formulae (I), (II), or (III):

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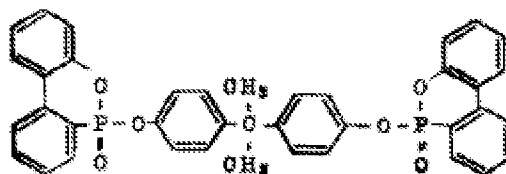


wherein R1 is H, carboxyl, 1-18C hydrocarbon or alkali metal; R4 is H, carboxyl, 1-18C hydrocarbon; R2 and R3 and R5-R10 are independently 1-10C hydrocarbyl or halogen atoms; Z1-Z5 are O or S; X is halogen; Y is alkylidene, cycloalkylidene, arylalkylidene, -S-, -SO-, -SO2- or -O-; P1-P4 are 0 or 1; n1-n9 are 0-4 [page 1 bottom-left column].

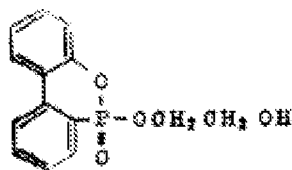
Specific examples of the compounds include:



(p)



(s)



(q) [page 3].

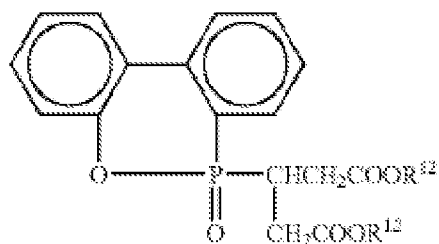
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The fibers may include titanium dioxide and carbon black [page 4]. A fiber spun with carbon black reads on a spun dyed fiber. A fiber blended with titanium dioxide inherently has the fine projections claimed in claim 4.

10. As a demonstration of the range of the amount of phosphorus compound in the composition, 500 to 20,000 ppm of compound (p) shown above corresponds to 0.35 to 14% by weight of compound (p) in the composition. The claimed range corresponds to 1.96 to 16.7% by weight of phosphorus compound.

11. Claims 1, 2, 4, 5, 7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Masuda et al (WO03008679 A1, herein US 7,332,563 B2 is used as an English language equivalent).

12. Masuda et al disclose polyester based fiber for artificial hair comprising (A) a polyester, (B) a polyarylate [3:28-33] and 0.5 to 10 parts by weight of (D) a phosphorus based flame retardant [5:15-19]. The polyester (A) is preferably polyethylene terephthalate, polypropylene terephthalate or polybutylene terephthalate [3:39-42]. The polyester fibers have fine protrusions on the surface [7:8-9] as a result of the polyarylate (B) [13:60-14:3] that is in particulate form [22:36-37]. The phosphorus based flame retardant may be an organic cyclic phosphorus compound such as:



[6:5].



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The fibers are formed through melt spinning [abstract] and have a finiteness of 30 to 70 dtex [25:50-51]. In the examples, the fibers are spun with a coloring agent (PESM 6100 containing carbon black) [29:23-25] which reads on spin-dyeing and inorganic fine particles.

### ***Information Disclosure Statement***

13. JP 63-185992 A, cited as an X category reference on the International Search Report for PCT/JP04/12039, was not used as in 35 USC § 102 rejection because the reference does not disclose and gives no guidance to the amount of phosphorus compound used in the polyester.

14. JP 54-43546 A, cited as an X category reference on the International Search Report for PCT/JP04/12039, was not used as in 35 USC § 102 rejection because the disclosed phosphinic amides do not anticipate the claimed cyclic organic phosphorus compounds or phosphoric ester amido compounds.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL DOLLINGER whose telephone number is (571)270-5464. The examiner can normally be reached on Monday - Thursday 7:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MICHAEL DOLLINGER  
Examiner  
Art Unit 1796

/mmd/

/James J. Seidleck/  
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